UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,197	08/18/2003	Youichi Hidaka	MA-581-US	1118

21254   7590   10/08/2008
MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC
8321 OLD COURTHOUSE ROAD
SUITE 200
VIENNA, VA 22182-3817

EXAMINER
WALSH, JOHN B

ART UNIT	PAPER NUMBER
2451	

MAIL DATE	DELIVERY MODE
10/08/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/642,197	HIDAKA ET AL.
	Examiner	**Art Unit**	
	John B. Walsh	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 July 2008*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some *   c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claim 1 is objected to because of the following informalities: Claim 1 recites "an other

said inserted VLAN tag". It is unclear if this is the same tag as the inserted tag or "an other

inserted VLAN tag" (thus claiming a new tag, not the previously claimed inserted tags).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

3.   Claims 8 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

Claims 8 and 17 are dependent upon claims 1 and 11 which are drawn to an Ethernet

frame. Claims 8 and 17 recite not restricting to a 64-byte minimum frame size restriction as

defined by a standard of said Ethernet. Therefore it is unclear how the applicant is claiming an

Ethernet packet, which would inherently be restricted to a standard, and then at another instance

not complying with the standard. Furthermore it is unclear what particular standard of Ethernet is

the claim referring to.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
> patent by another filed in the United States before the invention by the applicant for patent, except that an
> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
> subsection of an application filed in the United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English language.

5.   Claims 1- 19 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No.

6,526,056 to Rekter et al.

As best understood concerning claim 1, a node in an Ethernet network to relay an

Ethernet frame (column 7, lines 46, 49-50-Ethernet protocol) comprising: an element (fig. 7;

P2) which inserts two or more VLAN tags (column 4, lines 64-66; VC2, T3) into said frame and

removes an other said inserted VLAN tag in the relay process of said frame (column 8, lines 41-

54; abstract; fig. 7; T4 removed).

As concerns claim 2, a node as set forth in claim 1 further comprising element which

replaces two or more VLAN tags of said frame at a time (column 4, lines 64-66).

As concerns claim 3, a node as set forth in claim 1 further comprising: element which

administrates said two or more VLAN tags using the forwarding table memory (column 9, lines

5-6) for change of frame contents during frame relay.

As concerns claim 4, a node as set forth in claim 1 further comprising element which

searches the forwarding table memory (column 9, lines 5-6) using the information from two or

more VLAN tags in said frame during frame relay (col. 10, line 1; col. 5, lines 5-10; col. 6, lines

62-66; col. 8, lines 36-38).

As concerns claims 5 and 14, further comprising element which searches the forwarding table memory (column 9, lines 5-6) in the relay process of said frame with a combination of an information from two or more VLAN tags in said frame and an input port (column 5, line 5), a destination MAC address (column 7, line 52), a source MAC address (column 7, line 53) and a TYPE field information (column 7, line 55).

As concerns claims 6 and 15, further comprising element which provides a TTL area (column 8, line 24) to show the survival time of the frame in said VLAN tag inserted to said frame and checks whether said survival time has elapsed or not by the value in said TTL area and discards said frame after elapse of said survival time without relaying it in the relay process of said frame.

As concerns claims 7 and 16, further comprising element which decrements the value in said TTL area (column 37, lines 36-44) by one every time said frame is relayed.

As best understood concerning claims 8 and 17, wherein network control information (column 7, line 49-column 8, line 14;CRC, address, type field can be "control" information) is stored to said VLAN tag, said network control information not restricted to a 64-byte minimum frame size restriction of network control information, as defined by a standard of said Ethernet (claim does not positively set forth what the size of the frame is only some possibilities).

As concerns claims 9 and 18, further comprising element which changes a self-node status administration corresponding to the content of said VLAN tag (column 7, line 66-column 8, line 14).

As concerns claims 10 and 19, wherein the node status is stored to the area of said VLAN tag in the relayed frame corresponding to the self-node status (figures 1 and 2).

As concerns claim 11, a frame transfer method of the node to relay an Ethernet frame

comprising: receiving an Ethernet frame in said node (column 7, line 46-Ethernet protocol);

inserting two or more VLAN tags to said Ethernet frame at a time (column 4, lines 64-66) or

removing said inserted VLAN tags; and forwarding said Ethernet frame (abstract).

As concerns claim 12, a frame transfer method as set forth in claim 11 wherein a

forwarding table memory (column 9, lines 5-6) for frame contents change during frame relay is

used for administration of said two or more VLAN tags.

As concerns claim 13, a frame transfer method as set forth in claim 11 wherein a

forwarding table memory (column 9, lines 5-6) is searched during frame relay using the

information from two or more VLAN tags in said frame.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

7.   Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No.

6,526,056 to Rekter et al.

Rekter et al. '056 do not explicitly recite said network control information comprises 32-

bit network control tags. However, it would have been an obvious matter of design choice to

change the size of the data, since such a modification would have involved a mere change in the

size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

Response to Arguments

8.   Applicant's arguments filed July 9, 2008 have been fully considered but they are not persuasive.

The applicant argues Rekter fails to disclose the same unit inserting and removing tags. The claims have been given the broadest reasonable interpretation and the claims do not explicitly recite that the inserting and removing are done at the same point in time to the same single frame. Thus Rekter discloses an element, such as PE2, that inserts two tags in one direction and in an opposite direction would remove a tag (PE2 would function as done by PE1 in figures 1 and 7).

The applicant argues for claims 4, 5 and 14 that Rekter at col. 9, lines 5-6 fails to suggest that information from two or more VLAN tags are used for the forwarding table. The claims have been given the broadest reasonable interpretation and the tags of Rekter are used for forwarding decisions (col. 10, line 1). Rekter also discloses at least at col. 8, lines 36-38 that routing decisions must be made and the use of forwarding/routing tables (at least col. 5, lines 5-10; col. 6, lines 62-66). Thus the information from the tags is used for searching a table. Furthermore, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

   The applicant argues for claims 8 and 17 that Rekter does not suggest control information being stored in a tag that is inserted and only describes "generic" Ethernet control information. It is unclear what specific definitions applicant has defined as being "generic" or "control information". The VLAN tags of Rekter are used for making routing decisions and therefore comprise "control information" since they "control" the destination of the frame (see at least col. 10, line 1).

Conclusion

9.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

   A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Walsh whose telephone number is 571-272-7063. The examiner can normally be reached on Monday-Thursday from 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the
organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent
Application Information Retrieval (PAIR) system. Status information for published applications
may be obtained from either Private PAIR or Public PAIR. Status information for unpublished
applications is available through Private PAIR only. For more information about the PAIR
system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR
system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would
like assistance from a USPTO Customer Service Representative or access to the automated
information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John B. Walsh/
Primary Examiner, Art Unit 2151